Harnett County Natural Area Inventory

RAVEN ROCK STATE PARK Significant Natural Heritage Area

Site Significance: State Size: 4667 acres

Quadrangle: Mamers, Lillington **Ownership:** NC Division of Parks and Recreation; some private

SIGNIFICANT FEATURES: Tall cliffs, rich floodplain forests, a granite flatrock, and abundant wildflowers are just some of the features here. The Raven Rock liverwort (*Lejeunea glaucescens* var. *acrogyna*) occurs nowhere else in the world but at this State Park; Septima's clubtail dragonfly (*Gomphus septima*) is found in the state only in the upper Cape Fear drainage and is a Federal Species of Concern. More than 700 species of plants have been documented, reflecting the wide range of habitats present. To date, five rare plants and five rare animals have been found here.

LANDSCAPE RELATIONSHIPS: Raven Rock State Park lies three miles northwest of Lillington on both sides of the Cape Fear River. It is about a mile downstream from Camp Agape Significant Natural Heritage Area and two miles downstream from Buckhorn Levees SNHA in Chatham County.

SITE DESCRIPTION: The site's name derives from the huge rock ledge - half a mile long and over 100 feet high - that fronts the Cape Fear River; it is one of the most prominent landscape features of the entire river basin. The park's location close to the piedmont/coastal plain boundary has brought together many plants and animals that don't normally meet, such as Catawba rhododendron (*Rhododendron catawbiense*) and creeping blueberry (*Vaccinium crassifolium*). The variation in topography, moisture, and soils, coupled with a major river, has produced a large number of natural communities in a relatively small area.

Uplands are mostly covered with oak-hickory forest, dominated by white oak (*Quercus alba*), chestnut oak (*Q. montana*), mockernut hickory (*Carya alba*), pignut hickory (*C. glabra*), and loblolly pine (*Pinus taeda*), with sourwood (*Oxydendrum arboreum*), dogwood (*Cornus florida*) and sparkleberry (*Vaccinium arboreum*) beneath. Stony knolls in the southeastern sector of the park support remnants of longleaf pine-oak-hickory-wiregrass (*Pinus palustris-Quercus-Carya-Aristida stricta*), including some herbs and shrubs typical of the coastal plain.

Towards the river and along tributaries, Mesic Mixed Hardwood Forest predominates on slopes. Canopy trees include beech (*Fagus grandifolia*), oaks, tulip poplar (*Liriodendron tulipifera*), and scattered shortleaf pine (*P. echinata*), with an understory of American holly (*Ilex opaca*), dogwood, and hop hornbeam (*Ostrya virginiana*). Christmas fern (*Polystichum acrostichoides*) and spring wildflowers are numerous, including dimpled trout-lily (*Erythronium umbilicatum*), violets, starwort (*Stellaria pubera*), sweet cicely (*Osmorhiza longistylis*), rue anemone (*Anemonella thalictroides*), and mayapple (*Podophyllum peltatum*). Near a couple of rock outcrops soil pH and nutrients are elevated and support Basic Mesic Forest. Trees are similar, but also include umbrella magnolia